

NWS FORM E-5 (11-88) (PRES. BY WSOM E-41)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) WFO Jackson, Mississippi
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR: MONTH YEAR January 2004
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Alan Gerard, MIC In Charge of HSA DATE February 17th, 2004

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41)

Synopsis...

January was a month of temperature extremes and generally a month of below normal rainfall with the exception of southern portions of Northeast Louisiana and Southwest Mississippi.

From the 1st into the 3rd, wind flow associated with an upper level ridge prevented a surface cold front from pushing into the area. Consequently, most of the HSA stayed in the warm sector where temperatures and humidity levels were much above normal for the this time of the year. Although scattered showers fell during this period, rainfall amounts were less than .25 inches.

From late on the 4th into the 5th, a surface cold front pressed into and through the HSA. Arctic air plunged into the area behind the front bringing with it below normal temperatures. Rainfall amounts were less than .25 inches in north and northwestern portions of the HSA to 2.50 inches over southwest and east central sections. Some 24 hour rainfall totals ending at 7am on the 5th: 2.45 inches at Crystal Springs, MS; 2.23 inches at Union Church, MS; and 2.00 inches at Pat Harrison Waterway's Turkey Creek Water Park.

From the 8th into the 9th, a western Gulf Low formed and pushed across southern Louisiana and Mississippi producing rainfall over most of the HSA, with the heaviest falling over southwest portions of Mississippi. Rainfall amounts ranged from .25 to 1.50 inches.

From the 14th into the 15th, a weak front drifted from north to south across the area producing scattered light rain across northern portions of the HSA. Reported rainfall was less than .10 inches.

From late on the 16th until late on the 18th, a deep upper trough of low pressure tracked east through the region. An associated surface low and warm front pushed across the area bringing with it moderate to heavy rainfall. Rainfall amounts ranged from .50 to .75 inches in northwest sections of the HSA to 3.25 inches in southern sections of Northeast Louisiana and Southwest Mississippi. Some heavier rainfall totals for this event were: 3.35 inches at Union Church, MS; 2.85 inches at Clayton, LA; 2.41 inches at Larto Lake, LA; 2.13 inches at both Red River L/D #1, LA and

Vidalia, LA.

The most significant event of the month occurred from late on the 24th into the 26th. Once again, a strong upper trough moved across the HSA. An associated surface low pushed across northern Mississippi while another Low trekked northeast from the northwestern Gulf through southern Mississippi. The heaviest rainfall fell over Northeast Louisiana and western sections of Mississippi with amounts ranging from 1.25 to 3.00 inches. Some 24 hour rainfall amounts ending at 7am on the 25th: 3.03 inches at Grenada, MS; 2.75 inches at Cleveland, MS; 2.60 inches at Brookhaven, MS; and 2.65 inches at Oak Ridge, LA.

From late on the 29th into the 30th, a weaker surface low moved across the northern Gulf, bringing rainfall to Northeast Louisiana, Southeast Arkansas, and Southwest and Central Mississippi. Rainfall amounts ranged from .10 inches over southeast Arkansas to 1.50 inches over southern sections of Northeast Louisiana.

River and Soil Conditions...

Soil moisture levels remained slightly above normal over eastern most areas during the month. Soil moisture was normal to slightly above normal over most other sections of the HSA.

Minor flooding occurred along the Big Black River basin and the Tuscolameta Creek basin during the month

With normal to above normal soil moisture conditions and near normal rainfall expected for the next 60 to 90 days, flood potential should remain slightly above normal.

Rainfall for the month of January...

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
Southeast Arkansas (Chicot & Ashley counties)	3.50 to 4.00 inches	Below normal.
Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)	4.50 to 5.00 inches northern sections	Below normal.
	4.50 to 6.25 inches central sections	Below to near normal.
	6.00 to 8.00 inches southern section	At to above normal.
Lower Yazoo	4.00 to 6.00 inches	Below to near normal.

<i>Big Black</i>	<i>3.00 to 4.25 inches upper basin</i>	<i>Well below normal.</i>
	<i>4.50 to 4.75 inches middle basin</i>	<i>Well below normal.</i>
	<i>5.00 to 6.00 inches0 lower basin</i>	<i>At to below normal.</i>
<i>Homochitto/ Bayou Pierre</i>	<i>6.00 to 9.00 inches</i>	<i>At to well above normal.</i>
<i>Pearl (abv Jackson)</i>	<i>3.00 to 5.00 inches</i>	<i>Below to well below normal.</i>
<i>Pearl (Blo Jackson)</i>	<i>5.00 to 6.25 inches</i>	<i>At to below normal.</i>
<i>Pascagoula</i>	<i>3.00 to 5.75 inches over the Leaf basin.</i>	<i>Below to well below normal.</i>
	<i>3.50 to 3.75 inches over the Black Creek basin.</i>	<i>Well below normal.</i>
	<i>3.25 to 5.75 inches over the Chickasawhay</i>	<i>Below to well below normal.</i>
<i>Tombigbee tributaries in the JAN HSA</i>	<i>3.00 to 5.00 inches</i>	<i>Below to well below normal.</i>

The heaviest rainfall amounts in the HSA for the month were: 9.06 inches at Union Church, MS; 8.10 inches at Clayton, LA; 6.98 inches at Vidalia , LA; 6.92 inches at Jonesville, LA; 6.57 inches at Crystal Springs, MS; 6.47 inches at Natchez, MS; 6.23 inches at St. Joseph, LA; 6.16 inches at Brookhaven, MS; and 6.08 inches at Vicksburg, MS.

At the Jackson WFO, the January monthly rainfall was 4.23 inches, which was 1.44 inches below normal. Total rainfall for the year was 4.23 inches, which was 1.44 inches below normal.

At Meridian Key Field, the December monthly rainfall was 3.05 inches, which was 2.87 inches below normal. Total rainfall for the year was 3.05 inches, which was 2.87 inches below normal.

Mississippi River...

The Mississippi River from Arkansas City to Natchez experienced a rise until it crested between the 20th and 22nd of the month. The river receded to its monthly minimum stage at Arkansas City and Greenville on the last day of the month and just above its monthly minimum stage at Vicksburg and Natchez. The river was above seasonal norms for all of the month. The provisional high and low stages for January are listed below:

<i>Location</i>	<i>High Stage(ft)</i>	<i>Date</i>	<i>Low Stage(ft)</i>	<i>Date</i>
<i>Arkansas City, AR</i>	<i>25.60</i>	<i>01/20</i>	<i>17.04</i>	<i>01/31</i>
<i>Greenville, MS</i>	<i>37.16</i>	<i>01/20</i>	<i>29.00</i>	<i>01/31</i>
<i>Vicksburg, MS</i>	<i>22.03</i>	<i>01/22</i>	<i>22.03</i>	<i>01/01</i>
<i>Natchez,MS</i>	<i>37.87</i>	<i>01/22</i>	<i>29.08</i>	<i>01/01</i>

Products issued...

Total Flood Warning products issued: 9

Total Flood Statement products issued: 54

Daily Rainfall Products (RRA'S) issued 31

Daily River Forecast Products (RVS'S) issued: 31

Daily River Stage products (RVA'S) issued 31

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Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, Pearl River Basin Development District and the Mississippi Department of Environmental Quality.

*cc: USGS Little Rock District
USGS Ruston District
USACE Mobile District
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USACE Mississippi Valley Division
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SRH Climate, Weather and Water Division
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